

from beneath the anal angle of the hind wing. Tibiae and tarsi banded with dark-brown and white scales. Wing expanse: 10–11 mm. Moth in mid or late June.

*Male Genitalia* (Fig. 2)—Uncus trifid at apex. Gnathos with a single long hook. Caudo-lateral projection of tegumen strongly produced on the left side. Claspers asymmetrical, tubular, twisted; the right one considerably the larger, and expanded at the base. Aedoeagus arcuate. Vinculum produced apically into two almost symmetrical, elbowed sicae.

*Holotype*.—Male, SQUILAX (NEAR SALMON ARM), BRITISH COLUMBIA, June 19, 1951. Forest Insect Survey No. 50–2085. Reared from *Pinus contorta* Dougl. No. 6299 in the Canadian National Collection, Ottawa. *Paratypes*.—Three males and nine females, Squilax, British Columbia, June 19, 1951, Forest Insect Survey. Reared from *Pinus contorta*. No. 6299 in the Canadian National Collection, Ottawa.

*Food Plant*.—*Pinus contorta* Dougl.

This species has also been confused with *R. milleri* Bak. It is readily distinguished by the male genitalia and the suffused maculation. It is a needle miner that apparently requires only one year to complete its life-cycle.

#### ACKNOWLEDGMENTS

I am indebted to Dr. R. W. Stark, Forest Biology Laboratory, Calgary, Alberta, and Mr. J. H. McLeod, Entomology Laboratory, Belleville, Ontario, for their assistance in providing considerable material for study. I am also grateful to Mr. J. F. Gates Clarke, United States National Museum, Washington, D.C., for information and for the loan of many specimens.

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## AN IMPROVED METHOD FOR COLLECTING BRACHYCISTIDINE FEMALES

(Hymenoptera: Tiphidae)

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During the summer of 1956, the author was engaged in the collection of females of the subfamily Brachycistidinae in the Coachella Valley of California. These wingless nocturnal wasps occur mainly in sandy situations and are rather difficult to collect since they are quite rare. In the past, the principal method for

capturing them was to walk over sandy areas at night and search the surface of the ground with a gasoline lantern (Rozen, 1952:91). They have also been taken at stationary lights, however. Rozen *ibid.*, reports the attraction of females to stationary Coleman lanterns and Mickel and Krombein (1952:652) cite the capture of two specimens at Palm Springs in a gallon fruit can buried to the rim in the sand with a light suspended over it. In a recent shipment of material from the United States National Museum, there was a series of four females from Presidio, Texas taken in a trap similar to the above.

A light trap of this type is rather clumsy, not readily portable and requires a source of electric power or a stand for supporting a gasoline lantern. Thus a simple modification of this trap was devised which overcomes these disadvantages. It is easily carried and installed and makes the handling of specimens so obtained an easy matter. The trap consists of a gasoline lantern set on the ground in a suitable area and surrounded by a ring of cereal bowls sunk into the soil until their rims are flush with the surface. The trap functioned most efficiently when a closed ring of about seven bowls was placed around the base of each lantern.

The bowls used were of the ordinary porcelain type, 4½ inches in diameter and 2 inches deep (inside dimensions). The smooth glazed finish and steep sides prevented the escape of almost any crawling insect despite the shallow depth.

This method was employed from early June to early September in conjunction with other collecting techniques and was found to be quite successful in the capture of small brachycistidine females as well as certain other groups of insects and related arthropods. A few mutillid females, ants of several genera and species, and beetles (particularly Scarabaeidae and Tenebrionidae) were commonly found in the traps. Certain species of lepidoptera (Thysanura) were also collected in large numbers. Other arthropods frequently taken included spiders (mainly lycosids), solpugids and scorpions.

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